

Fracture Toughness and Brittleness of the Mancos Shale, Utah.

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Fracture toughness is a measure of a material's resistance to dynamic crack propagation. For linear elastic materials it is defined by the critical stress intensity factor, K_{IC} , beyond which catastrophic crack growth occurs. For materials which deviate from linear elasticity, cyclic loading of the specimen can be used to calculate the brittleness corrected Fracture toughness,